



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,596	10/19/2000	Lily Barkovic Mummert	YOR920000461-US1	8300
7590 Anne Vachon Dougherty 3173 Cedar Road Yorktown Heights, NY 10598			EXAMINER TODD, GREGORY G	
			ART UNIT 2157	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE			MAIL DATE	DELIVERY MODE
3 MONTHS			01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 09/692,596	Applicant(s) MUMMERT ET AL.	
	Examiner Gregory G. Todd	Art Unit 2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This office action is in response to applicant's amendment and request for continued examination filed, 04 January 2007, of application filed, with the above serial number, on 19 October 2000 in which claims 1, 10, and 12 have been amended. Claims 1-20 are therefore pending in the application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al (hereinafter "Yang", 6,542,854) in view of Lim (hereinafter "Lim", 6,360,256).

As per Claim 1, Yang teaches a method for evaluating workload across a processing environment having a plurality of computer systems each having a plurality of assigned workload units comprising the steps of:

assigning a plurality of impact values, one impact value for each workload unit assigned for each of the plurality of computing systems, wherein said assigning of each impact value comprises determining the change in system expiration date should a workload unit be removed from the system (at least col. 5 line 1 - col. 6 line 19; CAE/UFW/CAW using workload definition information for sizing/ cost purposes); and

assessing the workload based on said impact values (at least col. 33, lines 30-62; evaluating systems for suitable operation of workload).

Yang fails to explicitly teach a processing environment having a plurality of computer systems each having a plurality of assigned workload units. However, the use and advantages for using such a system is well known to one skilled in the art at the time the invention was made as evidenced by the teachings of Lim. Lim teaches distributing workload from a system (server) among other servers (at least col. 2, lines 1-5, 26-34; col. 4, lines 62-67). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to incorporate the use of Lim's system into Yang's system as Yang, while primarily concerned with the hardware of a single system, Yang also describes a plurality of user stations running the programs over a LAN (at least col. 33 line 64 – col. 34 line 6; col. 35 line 51 – col. 36 line 9), and thus with Lim, it would be obvious the capacity planning of Yang could be implemented with the workload balancing among a plurality of servers as in Lim.

As per Claim 2. The method of Claim 1 wherein the change in system expiration date is determined based on system life expectancy (at least col. 5, lines 1-17; col. 6, lines 6-22; col. 7, lines 31-62; workload growth, utilization).

As per Claim 3. The method of Claim 1 wherein the change in system expiration date is determined based on capacity space (at least col. 5, lines 1-17; col. 6, lines 6-22; col. 7, lines 31-62; col. 15, lines 35-54; capacity).

Art Unit: 2157

As per Claim 4. The method of Claim 1 further comprising sorting said workload units based on said impact values into a sorted impact list (at least col. 26 line 45 - col. 27 line 5).

As per Claim 5. The method of Claim 1 further comprising altering the workload in the processing environment to change expiration dates of at least two of said plurality of computer systems (at least col. 25, lines 13-20).

As per Claim 6. The method of Claim 1 further comprising comparing the expiration date of each of said plurality of computing systems to at least one target planning date for servicing each of said plurality of computing systems (at least col. 33, lines 30-62).

As per Claim 7. The method of Claim 6 further comprising altering the workload in the processing environment to change the expiration date relative to the target planning date for at least two of said plurality of computer systems (at least col. 25, lines 13-20).

As per Claim 8. The method of Claim 6 further comprising the steps of:
creating a From list of computer systems for which the expiration date precedes the at least one planning date;

creating a To list of computer systems for which the expiration date is later than said at least one planning date; and

reassigning workload units from computer systems on said From list to computer systems on said To list based on said impact values (at least col. 6, lines 9-36; transferable workload for capacity planning).

As per Claim 9. The method of Claim 8 further comprising calculating new expiration dates for computer systems on said From and said To lists after said reassigning (at least col. 5 line 1 - col. 6 line 36).

As per Claim 11. The apparatus of Claim 10 further comprising at least one storage location accessible by the administrative processor for storing data relating to said plurality of computer systems (at least Fig. 7).

Claims 10 and 12-20 do not add or define any additional limitations over claims 1-9 and 11 and therefore are rejected for similar reasons.

Response to Arguments

4. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Further, Applicants argue, in substance, that Yang fails to teach a) assigning a plurality of impact values, one impact value for each workload unit; and b) a system expiration date.

In response to a) and b), Examiner reiterates previous position:

As the specification defines:

"The impact of a workload unit is the effect on the system's expiration date that results from either adding the workload unit to the system or removing it. The impact is calculated by taking the difference between the expiration date before and after the workload change."

"For the purposes of the present invention, the use of the terms "expiration date", "life expectancy", and "capacity space" will be understood to be mutually-interchangeable alternatives representing measurements of a processing system's capacity." [Page 11]

Yang teaches modeling a workload by determining workload utilization and appropriately sizing and planning a computer activity workload CAW (at least col. 5 line

Art Unit: 2157

1 - col. 6 line 19; col. 3 line 66 - col. 4 line 13; CAE/UFW/CAW using workload definition information for sizing/ cost purposes). Thereby calculating the workload in terms of computing activity elements CAE for a given computing system, where the CAW is represented as CAE/time. Such sizing and capacity planning (expiration date as correlated to Applicant's description) being determined by evaluating the cost of the workload, and thus the effect of the difference (impact) in adding a workload unit versus not adding a workload unit to arrive at the best workload utilization for a given computing system.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Newly cited Odhner et al, in addition to previously cited Quernemoen, Papaefstathiou, Abu Electronic Ata, MacFarlane et al, Chafe, Fong et al, Miller, Hartsell et al, Mummert et al, Flockhart et al, and Sanders et al are cited for disclosing pertinent information related to the claimed invention. Applicants are requested to consider the prior art reference for relevant teachings when responding to this office action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory G. Todd whose telephone number is (571)272-4011. The examiner can normally be reached on Monday - Friday 9:00am-6:00pm w/ first Fridays off.

Art Unit: 2157

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

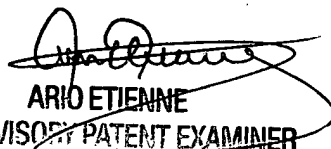
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregory Todd



Patent Examiner

Technology Center 2100



ARIO ETIENNE
SUPERVISOR PATENT EXAMINER
TECHNOLOGY CENTER 2100